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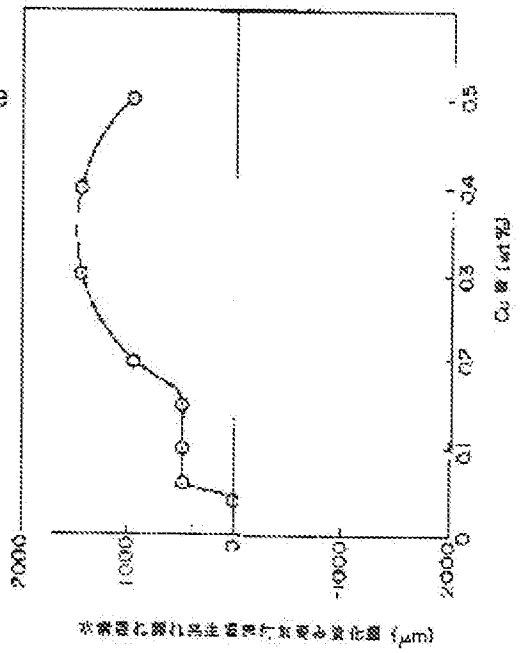
(54) METHOD OF PRODUCING ULTRAHIGH TENSILE STRENGTH ELECTRIC RESISTANCE WELDED TUBE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a method of producing an ultrahigh tensile strength electric resistance welded tube which has high tensile strength, and excellent hydrogen delayed fracture resistance, and moreover excellent corrosion resistance as well.

SOLUTION: A steel slab having a composition containing, by weight, 0.10 to 0.19% C, 0.01 to 0.5% Si, 0.8 to 2.2% Mn, 0.01 to 0.06% Al, 0.005 to 0.03% Nb and 0.0005 to 0.0030% B, and in which the content of P is controlled to ≤0.02%, S to ≤0.003%, N to ≤0.004%, and Ti to ≤0.015% is soaked at 1,150 to 1,300°C, is thereafter hot-rolled at a finishing temperature of an Ar3 or higher, and is coiled at 500 to 650°C into a hot rolled steel strip. The steel strip is pickled and cold-rolled, is



thereafter soaked and heated at 800 to 900°C and is rapidly cooled after that in a continuous annealing furnace, and is further subjected to tempering treatment at 150 to 250°C. This steel strip is made into a tube at a width drawing rate Q satisfying $1,000 \leq Q/(t/D)2 \leq 3,000$ to obtain the ultrahigh tensile strength electric resistance welded tube; wherein, Q=[{the width of the steel sheet-π(D-t)}/π(D-t)]×100, t (mm) is the sheet thickness, and D (mm) is the outside diameter of the steel tube.